

**JOB DESCRIPTION**  
**MURFREESBORO WATER AND SEWER DEPARTMENT**  
**SOFTWARE SPECIALIST**

**1. JOB TITLE: SOFTWARE SPECIALIST**

- 2. DEFINITION:** This is a technical position involving the production of highly skilled work in the design, development, and implementation of solutions to specific data processing needs. The position reports directly to the GIS Coordinator. All employees are responsible to the Director and to the City Manager. This position is classified as Non-Exempt for purposes of the Fair Labor Standards Act, as having no significant occupational exposure to bloodborne pathogens, and as Non-Safety Sensitive; the employee will be subject to post accident, reasonable suspicion, return to duty and follow-up drug and alcohol testing.

**3. EQUIPMENT / JOB LOCATION:**

- a. This position requires the use of computer workstations, personal computers, multiple software packages, large format scanners, blue print machines, calculators, vehicles, global positioning systems, tape measures and standard office machines.
- b. The primary location for this job is the Murfreesboro Water & Sewer Department Engineering Section. Periodic fieldwork will be required, and occasionally the employee will be exposed to dust, inclement weather, biological, physical and traffic hazards associated with water and sewer line mapping and construction. All City vehicles and buildings are smoke-free locations.

**4. ESSENTIAL FUNCTIONS OF THE JOB:**

- a. Designs, develops and implements solutions to specific data processing needs relating to municipal water distribution and wastewater collection systems, geographic information systems, customer service and billing, operations and maintenance, accounting, administration, and plant operation.
- b. Performs needs assessments for specific projects to ensure efficient and effective project design.
- c. Reviews effectiveness and efficiency with which specific information services are used and make recommendations to the GIS Coordinator.
- d. Develops database applications for use throughout the department.
- e. Manages and supervises information resources, coordinates database and application development.
- f. Develops time saving enhancements to frequently performed operations for use by the department.
- g. Assists with developing goals and objectives for the use of information technology within MWSD. Develops procedures, formulates strategies, and implements

solutions to meet these goals.

- h. Trains and instructs other MWSD personnel in the use of database methodology and technology.
- i. Prioritizes, coordinates, assigns, tracks, and evaluates progress of individual projects.
- j. Acts as a technology resource for the department.
- k. Coordinates training for end users of database projects.
- l. Enters data into computer.
- m. Sits, stands, lifts, stoops and walks intermittently.
- n. Communicates with the public, other employees of the city and employees of other government agencies to exchange information and data.
- o. Attends public meetings as required, some of which may be scheduled after normal working hours.

## **5. ADDITIONAL EXAMPLES OF WORK TO BE PERFORMED:**

- a. Assists GIS staff in maintaining geographic databases related to the operations of the Murfreesboro Water and Sewer Department.
- b. Operates global positioning system equipment in the field.
- c. Assists in the data collection and/or field verification.
- d. Maintains computer generated maps, reports, and data in a well organized format and assists others with the use of the information.
- e. Compiles and generates geographic data from multiple sources in preparation for the digital conversion process.
- f. Performs other duties and special projects as assigned.

## **6. REQUIRED KNOWLEDGE, SKILLS AND ABILITIES:**

- a. Bachelor's degree in Management Information Systems (or related field), two to five years of computer experience to include extensive knowledge of database programming, a working knowledge of technology resources, support and training; or any equivalent combination of education, training and experience which provides the requisite knowledge, skills and abilities for this position.
- b. Must have legal authorization to work in the United States.
- c. Must have a driver's license valid in the State of Tennessee and the ability to safely operate a motor vehicle.
- d. Must be able to comprehend both oral and written instructions and to communicate in English, both orally and in writing.
- e. Knowledge of Intel-based hardware and software applications, with an understanding of or the ability to learn the operating system.
- f. Ability to perform job responsibilities in a timely manner in order to meet scheduled deadlines.
- g. Ability to coordinate and supervise database projects.
- h. Have an aptitude for computers, as demonstrated through experience in database applications and project management involving database design and

implementation.

- i. Must be able to carry and operate global positioning equipment.
- j. Must demonstrate good temperament, judgment and human relation skills and be able to communicate effectively with developers, contractors, engineers, surveyors and others of the public, some of whom at times may be irate and unreasonable.
- k. Knowledge or ability to learn accepted standards and practices of a water distribution and wastewater collection systems.
- l. Ability to work independently and to formulate work procedures within the limits of the position to accomplish assigned task.
- m. Ability to train other workers.
- n. Must be neat and orderly and complete tasks in the allotted time.
- o. Knowledge of or ability to learn Occupational Safety Hazards and appropriate safety precautions and procedures.
- p. Ability to report to work on time and perform the duties of the job for an entire workday. Occasional overtime may be required under either emergency conditions or to attend meetings as required by the department.
- q. Ability to operate keyboards, transits, and global positioning satellite equipment.
- r. Ability to draw and to use computer assisted drawing devices.
- s. Ability to use standard office equipment.
- t. Ability to walk over rough terrain. This activity may be required for the full work day.
- u. Must be able to occasionally lift and carry equipment or files weighing approximately fifty pounds.
- v. Must be able to occasionally climb step ladders.
- w. The employee may be subject to a pre-employment physical examination with a written statement from the physician as to the employee's ability to meet the physical strength and dexterity requirements delineated above.

Non-Exempt  
Non-Safety Sensitive  
May 15, 2002